



The Weather Nut



Summer 2009

A newsletter from the NWS office in Wakefield, VA
"The Peanut Capital of the World"

Welcome to the Summer issue of "The Weather Nut." This issue includes articles on tropical weather, climatology, rip current safety, staff changes, NOAA Weather Radio, a crossword puzzle, and much more! If you have any weather questions or would like to request an article on a specific topic, please send an e-mail to Sonia.Mark.Flechtner@noaa.gov. I hope you enjoy The Weather Nut!

Understanding NOAA's Seasonal Hurricane Forecast

By William Sammler, Warning Coordination Meteorologist

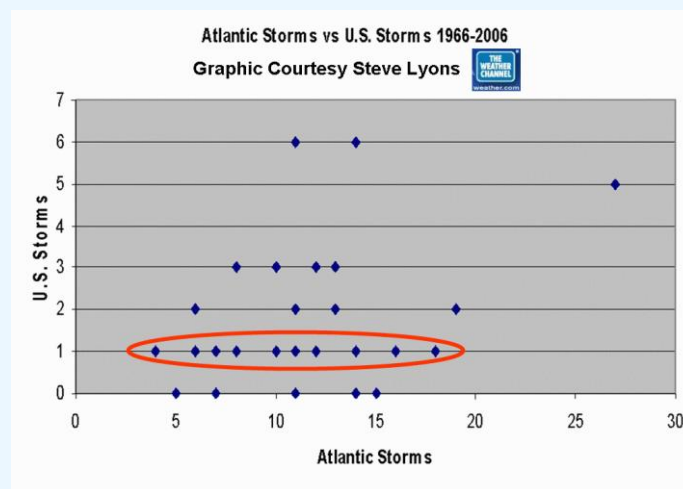
A lot of media attention was recently devoted to the seasonal hurricane forecast issued by NOAA on May 21st. The forecast, which called for a 75 percent chance of a normal to below normal season in the Atlantic Basin, indicated 9 to 14 storms were expected. Of those storms, 4 to 7 were expected to reach hurricane strength, with 1 to 3 of those storms reaching category 3 intensity or greater (i.e. packing winds of 115 mph or higher). Some of the factors affecting this year's hurricane season are cooler ocean temperatures in the eastern Atlantic Ocean (unfavorable), the potential for El Nino to develop in the equatorial Pacific (unfavorable), and warm water in the western Atlantic Ocean and Caribbean Sea (favorable).

NOAA 2009 Atlantic Hurricane Outlook		
Season and Activity Type	2009 Outlook	Normals
Chance Above Normal	25%	
Chance Near Normal	50%	
Chance Below Normal	25%	
Tropical Storms	9-14	11
Hurricanes	4-7	6
Major Hurricanes	1-3	2
ACE (% Median)	65%-130%	100%



While the media often makes a big deal out of the seasonal forecast, this forecast is really of little value when it comes to preparing for hurricane season. The seasonal forecast only estimates the number of storms throughout the season in the Atlantic Basin, as well as the number of storms expect to reach hurricane and/or major hurricane strength. There is no information with regard to when storms will develop, where they will develop, and what areas might be affected by tropical storms/hurricanes.

The graph on the next page generated by The Weather Channels' Dr. Steve Lyons clearly shows the lack of correlation between the total number of storms, and the number of storms that strike the U.S. Highlighted in the graph are the number of years in which 1 storm made landfall in the U.S. The range of total storm numbers for those years was 4 to 18!!!



The moral of the story is to prepare for every hurricane season as if it were going to be the worst, and hope for the best!

National Hurricane Center Changes for the 2009 Hurricane Season

By Jeff Lewitsky, General Forecaster

Hurricane season is once again upon us. The season runs from June 1st through November 30th every year, although tropical storms and hurricanes are still possible and have occurred in months outside of this period.

There have been some changes made to several of the products created and issued by the National Hurricane Center (NHC). The graphical tropical weather outlook (TWO) is now an official product, which has a three-tiered categorical forecast (low: <30%, medium: 30-50%, high: >50%) for tropical cyclone genesis. You can find the new graphical tropical weather outlook at the following address:

http://www.nhc.noaa.gov/qtwo_atl.shtml.

A change has also been made to the graphical forecast cone and track for active tropical storms and hurricanes. The default 'cone graphic' will no longer show the 'skinny black line', although it can still be toggled on for those that still wish to view it. The purpose of this is that NHC wants to make it more understood that landfall may occur anywhere within the cone, and that the focus should not be placed on the skinny black line. In addition, it is important to remember that tropical storm and/or hurricane conditions may occur up to hundreds of miles away from the exact point of landfall. Also, keep in mind that the farther that you go out in time in the forecast, the lower the track certainty and accuracy statistically is.



National Hurricane Center, Miami, FL

There is also a change to the Saffir-Simpson hurricane scale (SSHC). Earlier versions of the SSHC incorporated storm surge as a component of the categories, however storm surge will no longer be included. This is because hurricane size (the extent of hurricane force winds), local bathymetry (depth of near-shore waters), the forward speed and angle to the coast of a system, and topographic forcing are all important in forecasting storm surge. Each tropical system has its own unique characteristics for each of these factors, and thus it is not practical to include a default storm surge value in the SSHS categories. You can find more information on the SSHS scale at the following location: <http://www.nhc.noaa.gov/aboutsshs.shtml>.

There will also be an addition to the public forecast advisory. A rip current information/threat statement will now always be included for any land-falling tropical storm or hurricane, and for tropical storms and hurricanes that may not make landfall, yet may still produce a high threat of rip currents to coastal communities and beaches.

(Continued National Hurricane Center Changes for the 2009 Season...)

Also, a new and improved version of the NHC website for PDAs and smart phones is now available. You can find the mobile version of the NHC website at the following location:

<http://www.nhc.noaa.gov/mobile/index.html>. NHC staff will also begin creating and issuing an experimental PODCAST any time that the NHC media pool is activated, which typically occurs anytime there is a hurricane watch or warning in effect for the United States. You can find the PODCASTs at the following location: <http://www.nhc.noaa.gov/audio/index.shtml>.

Increasing Rip Current Awareness and Collaboration with our Beach Patrol Partners

By Jeffrey Lewitsky, General Forecaster



Now that it's almost officially summer, it's time for the busy season at the beach. Families flock to the beautiful beaches of the mega resort areas of Ocean City, MD, Virginia Beach, VA, Currituck County, NC, and everywhere in between. One of the biggest threats for these visitors is rip currents, and for many of them it is a threat that they may have little experience dealing with.

Our office issues daily rip current threat forecasts, along with detailed weather forecasts tailored specifically for the beaches. Our forecasters evaluate wave height and wave period observations from nearby buoys, as well as wind speed and wind direction observations from area piers and other coastal sites. We also look at computer model data for each of these parameters. In addition, tidal cycles are also a major component of rip current forecasts.

One key ingredient to our rip current forecasts that many people may be unaware of are the area beach patrols and lifesaving services. We rely heavily on the important communications that we have between us and the Ocean City Beach Patrol, Virginia Beach Lifesaving Service, and Corolla Ocean Rescue when determining what the rip current threat should be for their respective areas. They are our eyes and ears on the beach, and they often can become aware of quickly changing surf zone conditions before we do.

We recently traveled to and held meetings with each of these organizations at their individual headquarters in order to discuss how we can improve our rip current and beach forecasts here at the National Weather Service. They provided our forecasters with valuable feedback, and we will be updating our surf zone forecast to include more detailed information on conditions at the beach and in the surf zone. We will also be working with these partners to increase rip current awareness and outreach. Additional rip current signage, similar to the graphic above, rip current brochures and magnets, will be acquired and distributed to the local beach communities, including area hotels and motels, so that our visitors will know what to do if they ever are caught in a rip current.

(Continued Increasing Rip Current Awareness and Collaboration with our Beach Patrol Partners...)

You can find our forecasts, including graphical displays of the rip current threat level, at the following location: <http://www.erh.noaa.gov/er/akq/marine/rip.php>

Additional rip current information can be found at the following national NOAA site:

<http://ripcurrents.noaa.gov/> Also, June 7th through 13th is National Rip Current Awareness Week. Remember to always follow the advice and instructions given by the local beach patrol and lifeguards, and be especially cautious with entering the water during outgoing tides, which can improve and enhance rip current formation.

Lead Forecaster Jennifer McNatt Transfers to WFO Tampa

Jennifer graduated from Iowa State with a BS in Meteorology in 1997, and was commissioned into the Air Force as a 2nd Lt the same day. Her first assignment was to Barksdale AFB, LA where she was the Wing Weather Officer. She supported the B-52 bombers at the base, and deployed three times during her two years there...including Diego Garcia (in the middle of the Indian Ocean) to support operations in Iraq and twice to Fairford AB, England to support operations in Kosovo. In 1999, she went over to Osan AB, South Korea and spent two years there as a Wing Weather Officer, working at the base weather station issuing warnings, observations and forecasts, as well as working with the A-10 and F-16 squadrons flying daily missions.

In 2001, Jennifer came back to the U.S. to Keesler AFB, MS where she taught the Weather Officer Course for incoming Lt's in the Air Force. She was there for about a year and a half before separating from the Air Force and went to work for the National Weather Service in Lake Charles, LA as a journeyman forecaster. She transferred over to the Tallahassee, FL office in 2004 as a forecaster and spent two years there before getting a lead forecaster position here at the Wakefield office. Jennifer has been here for the last two and a half years - a personal record (as you can see, since she's typically moved every two years!) She is excited to move down to Tampa to be closer to family, but will miss the friends she's made here.

A Summary of the Wakefield 2008 Tropical Season

By Jeff Lewitsky, General Forecaster

Last year there were several tropical systems that impacted the Wakefield forecast area. We were fortunate enough to not have a land-falling hurricane along the Wakefield forecast area coast, although our area was still affected in different ways by these tropical systems.

The first tropical system to affect our area was Hurricane Bertha. Bertha initially developed as a tropical depression on the morning of Thursday, July 3rd, 2008 in far eastern Atlantic south of the Cape Verde Islands. It quickly intensified into a tropical storm later that morning, and reached hurricane strength on the morning of Monday, July 7th, as it continued to trek across the open waters of the north central Atlantic. It would reach a peak intensity of 120 mph (Category 3 on the Saffir-Simpson hurricane scale) later that day, before gradually weakening as it approached Bermuda. Its forward motion slowed considerably, and it would linger near Bermuda for several days. As Bertha continued to churn about 800 to 1000 miles east-southeast of the Mid-Atlantic coast, long period ocean swells travelled to across the eastern seaboard beaches. These high energy ocean swells generated an incredible amount of rip currents in the surf zone at our beaches. Ocean City, Maryland reported 2088 rip current related ocean rescues from July 10th through July 19th, while the Corolla Ocean Rescue reported 63 rescues. Fortunately no drownings were reported in our forecast area; however there were 3 drownings that occurred farther to the north at the New Jersey shore.

(Continued A Summary of the Wakefield 2008 Tropical Season...)

The next tropical system to affect us was Tropical Storm Cristobal. Cristobal initially developed as a tropical depression during the late evening hours of Friday, July 18th, 2009, just off the coast of South Carolina. It reached tropical storm strength on the afternoon of Saturday, July 19th. Cristobal slowly moved to the northeast towards the North Carolina outer banks, remaining just offshore. It remained over the water and accelerated to the northeast towards Nova Scotia before becoming extratropical. Cristobal did produce showers and thunderstorms over southeastern Virginia and northeastern North Carolina as the far outer bands of the circulation rotated through the area. Cristobal also generated rip currents at the area beaches. In addition, above normal tide levels did occur as a result of the persistent onshore flow in association with Cristobal, but no coastal flooding was reported.

The remnants of Tropical Storm Fay moved through the Mid-Atlantic region from Wednesday, August 27th through Saturday, August 30th. Periodic rain showers and thunderstorms occurred during this period, mainly over the northwestern half of our area, with the Richmond International Airport reporting 5.22" of rain in a 24 hour period (August 28th through 29th). In the meantime, Norfolk International Airport only recorded 0.03" of rain during that same time as the majority of the moisture remained well northwest of the Hampton Roads community.

Hurricane Hanna was the next tropical system to affect our area. Hanna initially developed as a tropical depression during the morning of Thursday, August 28th, 2008 east-northeast of the northern Leeward Islands. It intensified to tropical storm force strength later that morning, and eventually became a hurricane during the early afternoon hours of Monday, September 1st as it moved to the northwest through the Bahamas. Hanna would eventually weaken to a tropical storm as it moved closer to the southeastern US coast. Hanna made landfall near the South Carolina/North Carolina border shortly after midnight on Saturday, September 6th. It moved to the north and then northeast across the Wakefield forecast area during that same day. Hanna then moved away from the Delmarva and along the New England coast later that night. Hanna did produce significant rainfall as it moved through our area. Richmond International Airport recorded 2.49", the Norfolk International Airport had 0.96", the Salisbury, Maryland airport reported 1.83", and the Elizabeth City airport had 1.73". The highest amounts of rain occurred in the piedmont counties, with up to 8.00" of rain reported in Prince Edward County. Gusty winds did bring some trees and powerlines down. In addition, Dorchester County Maryland experienced several hours of severe coastal flooding with water levels running 4.5 feet above mean lower low water. Residual ocean swells from Hanna also produced rip currents along the Mid-Atlantic beaches.

Aviation News

By Mike Rusnak, Lead Forecaster & Aviation Program Manager

On Thursday May 21st, WFO Wakefield hosted a local aviation workshop. Several staff members and military personnel were in attendance. Presentations included talks on Hot Air Ballooning and How Pilots use the NWS TAFs, Local Airport Considerations and Aviation Accidents / Litigation. Remote presentations included discussions on CWSU Operations and Products from the Leesburg CWSU and Weather Factors in Commercial Aviation by Southwest Airlines. The Regional Aviation Meteorologist (RAM) gave a talk on the Future of Aviation Weather and our Aviation Customers. This workshop resulted in improved collaboration with our aviation partners and customers.

(Continued Aviation News...)

Festival of Flight

On May 30th and 31st, WFO Wakefield participated in the 12th annual Virginia Regional Festival of Flight at the Suffolk Executive Airport (SFQ). Forecasters Mike Rusnak and Jennifer McNatt staffed the NWS booth at this aviation expo, with nearly 300 planes in attendance. Several builders of private planes and numerous weather enthusiasts stopped by the booth, providing numerous compliments regarding AKQ products and services. Information on the NWS's aviation program as well as a listing of aviation web sites was available. Hurricane tracking charts and severe weather brochures were popular items, especially with several school teachers.



Mike and Jennifer also provided daily weather forum presentations titled "The making of NWS Aviation Forecasts". This presentation satisfied a training requirement for the Virginia Aviation Ambassador Program.

NOAA Weather Radio News

By James Foster, Hydrometeorological Technician



As you may already know, this office performs a weekly NOAA weather radio alarm test every Wednesday between 11:30 AM and noon. After getting numerous requests to perform the test at different times to accommodate those who cannot listen to the Wednesday morning test, we decided to add an evening test on the first Wednesday of the month. The evening test will be done in addition to the morning test, so there will be TWO alarm tests conducted on the first Wednesday of every month. The evening test will be conducted between 6:00 and 6:30 PM. As usual, the alarm test will be postponed until the following day if hazardous weather conditions threaten. We encourage you to give us a call if for some reason you are not receiving the alarm test.

(Continued [NOAA Weather Radio News...](#))

NWS Wakefield has six NOAA weather radio transmitter towers. They are located in Richmond, VA (162.475 mhz), Norfolk, VA (162.550 mhz), Heathsville, VA (162.400 mhz), Salisbury, MD (162.475 mhz), Margarettsville, NC (162.450 mhz), and Windsor, NC (162.525 mhz). Although these transmitters cover the majority of our broadcast service area, some locations may still have poor reception. You may benefit by trying to find a transmitter from a neighboring weather office. For instance, parts of Louisa and Fluvanna counties can receive better reception from the Covesville transmitter near Charlottesville, Va (162.450 mhz) than from the Richmond transmitter. You can find NOAA weather radio coverage maps at <http://www.nws.noaa.gov/nwr/usframes.html>. These maps will tell you where NOAA weather radio broadcast reception is normally good and where it may be poor. Please call us if you have any questions.

Hail of a Change

By William Sammler, Warning Coordination Meteorologist

Hail Diameter Size (Inches)	Description
1/2	Marble Size
3/4	Penny Size
7/8	Nickel Size
1	Quarter Size
1 1/4	Half Dollar Size
1 1/2	Ping Pong Ball Size
1 3/4	Golf Ball Size
2	Egg Size
2 1/2	Tennis Ball Size
2 3/4	Baseball Size
3	Teacup Size
4	Grapefruit Size
4 1/2	Softball Size

Since 1950, the verifying criterion for a severe thunderstorm based upon hail size has been $\frac{3}{4}$ inch (penny size). For the last 4 years, NWS offices in Kansas have been experimenting with increasing the criteria to 1 inch. The response has been overwhelmingly positive. So much so that the entire Central Region of the NWS (basically from Colorado, Wyoming and the Dakotas east to Kentucky, Indiana and Michigan) has changed to a 1 inch hail severe thunderstorm criteria. In an effort to foster consistency, Southern and Eastern regions of the NWS will move to the 1 inch criteria on January 1, 2010.

What does this change mean? First, the number of severe thunderstorm warnings for hail only will be reduced by 20 to 30 percent. Second, it will take some time for us to re-calibrate our thinking with respect to warning for hail producing thunderstorms.

Third, although the hail criterion is increasing, the wind criteria will remain constant. Thus, warnings will continue to be issued for storms which produce damaging winds and hail less than 1 inch in diameter. Finally, all of you will have to re-calibrate your thinking with respect to hail. NWS Wakefield will continue to want any hail reports you have. But remember, after January 1, 2010, only those storms producing 1 inch hail or greater will be considered severe.

Forecaster Biography: Brian Hurley

Brian graduated from Penn State with a BS in Meteorology in 1992, and went right to work as a Meteorological Intern for the National Weather Service Station in Houghton Lake, Michigan, a small resort community in the northern portion of Michigan's Lower Peninsula. Brian remained a resident of northern Lower Michigan for 8-plus years, as he moved to Gaylord in late 1995 while being promoted to Journeyman Forecaster at the newly-opened Gaylord National Weather Service Weather Forecast Office. In 1998, Brian received an on-station promotion to Senior Forecaster at NWS Gaylord.

(Continued Forecaster Biography: Brian Hurley...)

In September of 2001, Brian and his family decided they'd had enough of 100-plus inches of snow annually and transferred to the Wakefield, Virginia NWS Station as a Senior Forecaster. Brian and his family currently reside in Chester. This was Brian's third tour in the commonwealth, a "homecoming" of sorts, as he had previously lived in northern Virginia and Hampton Roads several years ago while his father served in the Air Force.

Brian's interest in weather began as a young boy, around 8 or 9, with a particular fascination (and vivid memory) of some memorable east coast winter storms while growing up in the late '70s and '80s. Brian is still a huge fan of winter storms, but as an outdoor enthusiast has become increasingly fond of activities enjoyed in the warmer months, which include camping, hiking, biking, and spending quality time at the beach or the pool with family and friends.

Spring 2009 Climate Summary

By Lyle Alexander, Meteorologist

Spring 2009 in the Wakefield Forecast Area was slightly warmer and wetter than normal at most locations.

March came in like a "lion" with a significant snowstorm over all of the area except Tidewater Virginia and coastal portions of North Carolina. Six to 10 inches of snow fell from the south-central to the northern neck portions of Virginia. The cold temperatures that followed produced monthly all-time record low temperatures for March of 10 degrees at Richmond and 1 degree at Salisbury. More information on these events can be found in our previous newsletter.

Considering our four primary climate stations (Richmond, Norfolk, Salisbury and Elizabeth City), the spring season overall ended up with above normal temperatures although March was cooler than normal. Precipitation averaged below normal except above normal at Norfolk.

A brief period of warm temperatures occurred on the heels of the initial cold snap in March with temperatures in the lower 80s at most locations on the 8th, 9th and 11th. The rest of the month had mainly below normal temperatures. General rainfall of 1 to 3 inches occurred on the 27th and 28th which left most of the area with above normal precipitation except at Salisbury.

Most of April was warmer than normal. An early season "hot" spell brought temperatures of around 90 degrees from the 25th through the 27th. Richmond registered three days of 90 and above, Norfolk and Salisbury 2 days and Elizabeth City fell just short of the 90 mark.

Rainfall was fairly well spread out from the 1st through the 24th. Rainfall was below normal in April except above normal at Salisbury (flip-flop of March's pattern).

In the evening and early morning of April 25th-26th, the Maryland portion of the eastern shore experienced a Heat Burst. It's a rare phenomenon that is known to occur in the Great Plains but is virtually unheard of on the East Coast. The temperature at Salisbury climbed to 87 degrees at 2 AM along with wind gusts to 52 mph from a dissipating thunderstorm. For more information, there is a story on our website:

http://www.erh.noaa.gov/akq/wx_events/severe/HeatBurst42609/heatburst_20090426.htm

(Continued Spring 2009 Climate Summary...)

May had above normal temperatures throughout the area but without any 90 degree temperatures. Precipitation varied widely across the area with most of the rain occurring in the first half of the month. Salisbury and Norfolk checked in around an inch above normal while Richmond and Elizabeth City were a bit below. Here at Wakefield, 8.73 inches of rain fell in May, the wettest May on record. Records have been kept here since 1983.

The last day of freezing was in April at most rural locations. At the more urban locations of Norfolk and Richmond, the last day of freezing occurred in late March. At Salisbury, the temperature dropped to 32 degrees on May 20th.

Severe weather is a normal spring feature and several events occurred from May 4th through the 11th with hail and damaging winds at several locations. A tornado did some minor damage at the Great Bridge area of Chesapeake, VA on the evening of May 4th.

What will summer bring? For the months of June through August, the Climate Prediction Center calls for above normal temperatures. There are no clear indications for precipitation departures. At Richmond, the last 4 summers have had more than 50 days of 90 degree temperatures. There has never been more than 4 consecutive years with more than 50 days of 90+ temperatures. Climatology would suggest that Richmond will likely fall below that 50 day threshold in 2009. The average number is 39.

Weather Performance Goals and Measures

By Anthony Siebers, Meteorologist in Charge

In 1993, Congress passed the Government Performance Results Act (GPRA), which required agencies such as the National Weather Service (NWS) to develop 5-year strategic plans, and to establish performance measure goals. NWS has 15 performance measures that are reported to Congress each year. Eleven of these performance measures apply to every Weather Forecast Office, such as the Wakefield office (see Table 1).

Table 1. National Weather Service Performance Measures for 2008

Performance Measure	All NWS Goal 2008	All NWS Actual 2008
Tornado Warning Accuracy (%)	67	72
Tornado Warning False Alarm Rate (%)	74	75
Tornado Warning Lead Time (Minutes)	11	14
Flash Flood Warning Accuracy (%)	90	91
Flash Flood Warning Lead Time (Minutes)	49	77
Winter Storm Warning Accuracy (%)	90	89
Winter Storm Warning Lead Time (Hours)	15	17
Aviation Forecast Accuracy – Ceiling and Visibility (%)	63	62
Aviation Forecast False Alarm Rate – Ceiling and Visibility (%)	44	39
Marine Wind Speed Accuracy (%)	68	72
Marine Wave Height Accuracy (%)	73	77

(Continued Weather Performance Goals and Measures...)

Accuracy is defined as the percent of events that occur that we correctly predict. Higher numbers are better scores.

False Alarm Rate is defined as the percent of time that we forecast the event and it does not occur. Lower numbers are better scores. For example, when a tornado warning is issued for a specific area and for a specific period of time and no tornado occurs within the spatial and temporal confines specified in the warning, a false alarm is said to have occurred. A False Alarm Rate of zero would be a perfect score.

Lead Time is defined as the amount of time after a warning is issued that the event occurs (note that missed events count as a zero for lead time computations). Higher numbers are better scores.

These numbers are for all of the Weather Service offices nationwide. We met 8 out of 11 goals. The 3 goals that were missed were all missed by 1%. Our performance goals increase from year to year, so we are always striving to improve. We have many more verification statistics besides these 11 that we keep track of. Our customers should know that we keep track of all of our verification, and have made large improvements over the past several years.

For Wakefield, we had 371 severe thunderstorms in 2008. Of these, we had warnings in effect for 295 storms. The accuracy was $295/371 = 79.5\%$. The average lead time was 16.6 minutes, and the False Alarm Rate was 43.8%.

Forecaster Biography: Chris Wamsley



Meteorologist Chris Wamsley was born in Cleveland, Ohio. He is a graduate of Central Michigan University with a degree in Meteorology and also has a bachelor's in Human Resource Management.

Chris found his niche in forecasting working weekends for Detroit's WJR 760 AM radio station while in school. After graduating, he worked in the private sector in Boston, MA before entering the National Weather Service. He has brought a significant amount of severe weather experience to the office, but also enjoys a good snowstorm since he grew up in the snow-belt of northeastern Ohio.

When he isn't looking at weather maps, Chris enjoys watching all kinds of sports (especially college football). He also enjoys golfing, skiing in the winter, playing with his dog, and cooking. On an interesting note, he came close to going to culinary school instead of choosing meteorology.

2009 Wakefield Tropical Workshop

By Jeff Lewitsky, General Forecaster

Our office hosted a local tropical workshop in late May for our forecasters and other staff. We also invited military personnel from the Hampton Roads area.

Our Warning Coordination Meteorologist Bill Sammler gave presentations on the SLOSH (Sea, Lake and Overland Surges from Hurricanes) model, which is a computerized model run by the National Hurricane Center (NHC). The SLOSH is used to estimate storm surge heights associated with land-falling and historical tropical storms and hurricanes. Mr. Sammler also gave a presentation on HURREVAC (HURRICANE EVACuation program), which is a computer software program used primarily by the emergency management community, to track tropical storms and hurricanes for decision-making purposes for their respective communities. LTJG Matt Glazewski, the Technical and Operations Coordination Meteorologist for the Ocean Prediction Center in Camp Springs, MD, gave a presentation on the role of the OPC during tropical weather. Mr. David Roth, a meteorologist with the Hydrometeorological Prediction Center in Camp Springs, MD, gave a presentation on quantitative precipitation forecasts that HPC generates for land-falling tropical systems. Mr. Roth also discussed the role of HPC during the tropical season. HPC is the official backup center for the National Hurricane Center. They also participate in daily coordination conference calls with the NHC and local weather forecast offices.

Remote presentations were given by two members of the National Hurricane Center. Dr. Mike Brennan, a Senior Hurricane Specialist, gave a presentation on what's new and changing with NHC products and services with the 2009 tropical season (see the following article on these NHC changes). Jamie Rhome, the Storm Surge Team Leader at NHC, gave a presentation on new updates, advances and changes to storm surge modeling. Lastly, another remote presentation was given by instructor Shannon White, on changes to the Hurricane Local Statement (HLS), which is issued by every coastal weather forecast office when a tropical system is expected to make land-fall or impact a coastal and/or inland area. This statement includes information on any tropical storm and/or hurricane watches and warnings that are in effect, as well as information on any expected risk of tornadoes, storm surge, rainfall accumulations, inland flooding, rip currents, and any other pertinent information.

The result of this workshop will be improved collaboration between our weather forecast office and our partners and users.

And now for "The Nutty Word Find"...

Crossword Puzzle



The Nutty Word Find



I N I E O W U H H R D P I G W L H R I T O R S D L
L D O N I G I A H E W R R R N N E W T W H D F T H
L R S R L T A I D A S E E E E G R U S M R O T S C
A S S S I S P L R H W C R U O O W T D T S C S O L
F W I G R O M N R U C I E B A R O M E T E R O T O
N R A D U I A A R G P D W T S E A S O N S M O U
I A D D V N D O F R N I N R O U T I R H T I E O D
A N N O G A T G S I I T U R R W S U R A T E W A S
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S N U O C A F E R E G O G A O R R N W A D L I L A
S T E N T L E N E S I N C N U W O M A U U N T R N
P R T U A W R F V T L O R O O S F M C S W O N S R
E R E T W R D S C O R E S W N S N T V R N W W V I



WORD LIST

BAROMETER
FLOOD
HAIL
PRECIPITATION
SEASONS
SNOW
WATCH

CLOUDS
FORECAST
HURRICANE
RAINFALL
SEVERE
THUNDER
WARNING

CUMULUS
FRONT
LIGHTNING
RADAR
STORMSURGE
TORNADO
WIND

Crossword Puzzle Answer Key



The Nutty Word Find



I N I E O W U H H R D P I G W L H R I T O R S D L
L D O N I G I A H E W R R R N N E W T W H D F T H
L R S R L T A I D A S E E E E G R U S M R O T S C
A S S S I S P L R H W C R U O O W T D T S C S O L
F W I G R O M N R U C I E B A R O M E T E R O T O
N R A D U I A A R G P D W T S E A S O N S M O U
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S N U O C A F E R E G O G A O R R N W A D L I L A
S T E N T L E N E S I N C N U W O M A U U N T R N
P R T U A W R F V T L O R O O S F M C S W O N S R
E R E T W R D S C O R E S W N S N T V R N W W V I



WORD LIST

BAROMETER
FLOOD
HAIL
PRECIPITATION
SEASONS
SNOW
WATCH

CLOUDS
FORECAST
HURRICANE
RAINFALL
SEVERE
THUNDER
WARNING

CUMULUS
FRONT
LIGHTNING
RADAR
STORMSURGE
TORNADO
WIND

